

Fleurchem, Inc.

By Gerard Mosciano



Jack Sniado, Fleurchem's vice president of sales, recently gave me a tour of the company's 200,000 ft² headquarters in Middletown, NY. George Gluck founded the company in 1984, and by 1996 its continuing growth necessitated expansion into what were once the manufacturing facilities of PFW/Hercules. The growth has

allowed Fleurchem to produce a full range of natural isolates, synthetic chemicals, and chemical specialties for both the flavor and fragrance industry. Additionally, the company performs toll manufacturing and custom chemical synthesis for a wide range of national and international customers. While Fleurchem is based in the United States, it maintains offices and agents in several countries, and is actively engaged in several overseas joint ventures.

The Middletown facility has production capabilities ranging from 1 kilo to 4,500 kilograms. The site includes over a dozen modular and interchangeable reactors, and distillation units ranging from 100-1,000 gallons, which facilitate customization of products as needed. There are three in-house quality control facilities that are, in part, responsible for a two-year batch retention program. The facility provides computerized tracing and, in the near future, will offer computerized plant distillation and purification reactors.

Fleurchem employs 40, including technical, research, evaluation and quality control staff, overseeing the production of some 1,300 items. The inventory consists of 85 percent natural ingredients and 15 percent synthetic ingredients. Approximately 75 percent of these ingredients are stock ingredients, with the remainder being custom or specialty items. All flavor ingredients produced are Kosher and Halal.

Gerard Mosciano is joined by Wayne Pohero; Judith Michalski, chief creative flavorist, Silesia Flavors; Carl Holmgren, chief creative flavorist, director of flavor development, Brooklyn by Perfetti Ltd.; and Douglas Young, senior creative flavorist, Dragoco, in the organoleptic evaluations presented here.

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ORGANOLEPTIC EVALUATIONS:

cis-3-Hexenyl Acetate Natural

FEMA# 3171, CAS# 3681-71-8, Nature identical

Natural Occurrence: Apple, melon, peach, pear, raspberry, strawberry, tomato and Virginia tobacco.

Odor: @ 1.0%. Grassy, fresh green, sweet, fruity, apple, pear, pineapple, tomato, banana skin and strawberry.

Taste: @ 1-15 PPM. Green, fruity, pear, apple, fresh leafy, vegetative tomato, berry, tea, cucumber and strawberry.

Possible Applications: Unripe banana, apple, pear, pineapple, melon, tea and mango. Vegetative notes in radish and tomato.

Menthyl Acetate Natural

FEMA# 2668, CAS# 16409-45-3, Nature identical

Natural Occurrence: Eucalyptus oil.

Odor: @ 1%. Minty, tea, fruity, cooling wintergreen-like, sweet green berry with spicy and neroli nuances.

Taste: @ 5-25 PPM. Cooling, fruity, blackberry, blueberry, green, peach, cooling wintergreen minty, with sen-sen, ambrette and red licorice nuances.

Possible Applications: Raspberry, peach, blueberry modifier for linalool, tea, mint, tropical guava, melon, ginger, sen-sen, blackberry and red licorice.

Methyl Anthranilate Natural

FEMA# 2682, CAS# 134-20-3, Nature identical

Natural Occurrence: Cocoa, coffee, grape, grapefruit, jasmine, lemon, lime, mandarin, strawberry and tangerine.

Odor: @ 1.0%. Musty, fruity, sweet, anthranilate, phenolic and slightly medicinal. Floral and powdery with Concord grape, mandarin and petitgrain nuances.

Taste: @ 2-5 PPM. Musty, fruity Concord grape, tangerine, blueberry with powdery nuances.

Possible Applications: Concord grape, citrus nuances, blueberry, herbal nuances, mandarin, tangerine, powdery nuances.

β-Ionone Natural

FEMA# 2595, CAS# 8013-90-9, Nature identical

Natural Occurrence: Tobacco, grape, grape brandy, orange juice, papaya, peach, raspberry, roasted almond, tea and spearmint

Odor: @ 1.0%. Sweet, oily, floral, berry, woody and seedy with ripe raspberry fruity notes with a soapy nuance.

Taste: @ 1-20 PPM. Raspberry, floral, woody cedar-like, seedy, ripe with juicy, jamy and fruity nuances.

Possible Applications: Raspberry, berry, tea, tropical nuances, violet nuances, fruit-punch notes, grape, tomato and peach.

Rhodinyl Butyrate Natural

FEMA# 2982, CAS# 141-16-2, Nature identical

Natural Occurrence: Orange juice, tomato, yellow and purple passion fruit.

Odor: @ 2.0%. Floral, fruity, sweet, blueberry with tropical and citrus nuances, ripe melon notes.

Taste: @ 10 PPM. Floral, powdery, waxy, melon, fruity and berry with tropical and citrus nuances.

Possible Applications: Apple, plum, tropical fruits such as passion fruit and mango, melon, floral rose and citrus nuances.

trans-2-Hexenyl Acetate Natural

FEMA# 2564, CAS# 2497-18-9, Nature identical

Natural Occurrence: Apple, banana, black currant, mango, peach, pear, strawberry and tea.

Odor: @ 1%. Green leafy, fresh, waxy apple, ripe pear, herbal, vegetative cucumber, unripe fruit such as banana with celery and grassy notes.

Taste: @ 1-5 PPM. Green, waxy, fresh fruity, apple and pear, strawberry, banana with a vegetative cucumber and melon nuance.

Possible Applications: General purpose fresh green note for fruits. Apple, pear, melon, pineapple, grape and banana, vegetative notes for tomato, herbal nuances for leafy spices.

Vanillin Isobutyrate Natural

FEMA# 3754, CAS# 20665-85-4, Not nature identical

Odor: @ 1.0%. Sweet, vanilla, creamy, powdery, cocoa, yellow cake and coconut-like with a cooked cookie and fruity nuance.

Taste: @ 5-15 PPM. Creamy, sweet powdery vanilla ice cream, fruity strawberry, coconut with toffee, eggnog and milky cream soda nuances.

Possible Applications: Vanilla cream, coconut, butterscotch, milk chocolate, eggnog, yellow cake flavors, strawberry, cream soda, butter vanilla, caramellic nuances, rich custard.

Furfuryl Propionate Natural

FEMA# 3346, CAS# 623-19-8, Nature identical

Natural Occurrence: Coffee, cooked pork and licorice.

Odor: @ 1.0%. Sweet, ripe pineapple, banana, musty woody, slightly fermented tropical nuances, fruity notes for licorice and honey.

Taste: @ 20 PPM. Sweet, licorice, dirty, fruity over ripe pineapple, apple, banana and tropical.

Possible Applications: Ripe nuances for pineapple, apple and banana. Wine bouquet, grape, raisin, date and fig and honey.

Compound 1020 Natural (Acetoin Replacer)

Compounded product

Odor: @ 1%. Nutty, caramellic, dairy, crackerjack, strong buttery and creamy with popcorn nuances.

Taste: @ 5 PPM. Creamy, caramellic, cooked milk, fatty mouth feel, buttery and butterscotch.

Possible Applications: Strawberry, milk chocolate, caramel, butterscotch, popcorn, butter, cheese nuances, fat flavors and baked goods.

Thiogeraniol Natural

FEMA# 3472, CAS# 39067-80-6, Not nature identical

Odor: @ 1.0%. Sulfurous, tropical mango, citrus grape fruit, Concord grape with vegetative green pepper nuances

Taste: @ 0.005-1.0 PPM. Sulfurous, tropical passion fruit and mango, citrus grapefruit, vegetative phthalide and tomato nuances.

Possible Applications: Grapefruit, mango, passion fruit, citrus, celery, tomato, black currant, Concord grape. ■